

# Chapter 7: Mitigation Donation Annual Report

Marjorie R. Moore

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## INTRODUCTION

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This report is specific to two mitigation projects: Corkscrew Regional Ecosystem Watershed (CREW) located in Lee and Collier counties, and Pennsuco Regional Mitigation Area located in Miami-Dade County for Fiscal Year 2006 (FY2006) (October 1, 2005 through September 30, 2006). In accordance with Chapter 373.414(1)(b)(2), Florida Statutes, this report provides a description of the two endorsed mitigation projects, including the available mitigation fund balance, expenditures during this time frame, and, where applicable, success criteria, monitoring, and long-term management. The two mitigation sites no longer accept mitigation funds as a means of offsetting wetland impacts; however, they continue as expenditure sites.

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## CORKSCREW REGIONAL ECOSYSTEM WATERSHED

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The Corkscrew Regional Ecosystem Watershed (CREW) is a vast project covering approximately 60,000 acres in Lee and Collier counties (**Figure 7-1**). The CREW lands contain some of the largest remaining pristine cypress wetlands in the United States, providing habitat to several rare, threatened, and endangered species. In June 1995, the South Florida Water Management District (SFWMD or District) began accepting cash payments for CREW as a form of mitigation to offset impacts to wetlands. Mitigation funding provides land acquisition, chemical treatment of exotics, hydrologic enhancement, monitoring of restoration progress, and management through security control and prescribed burning.

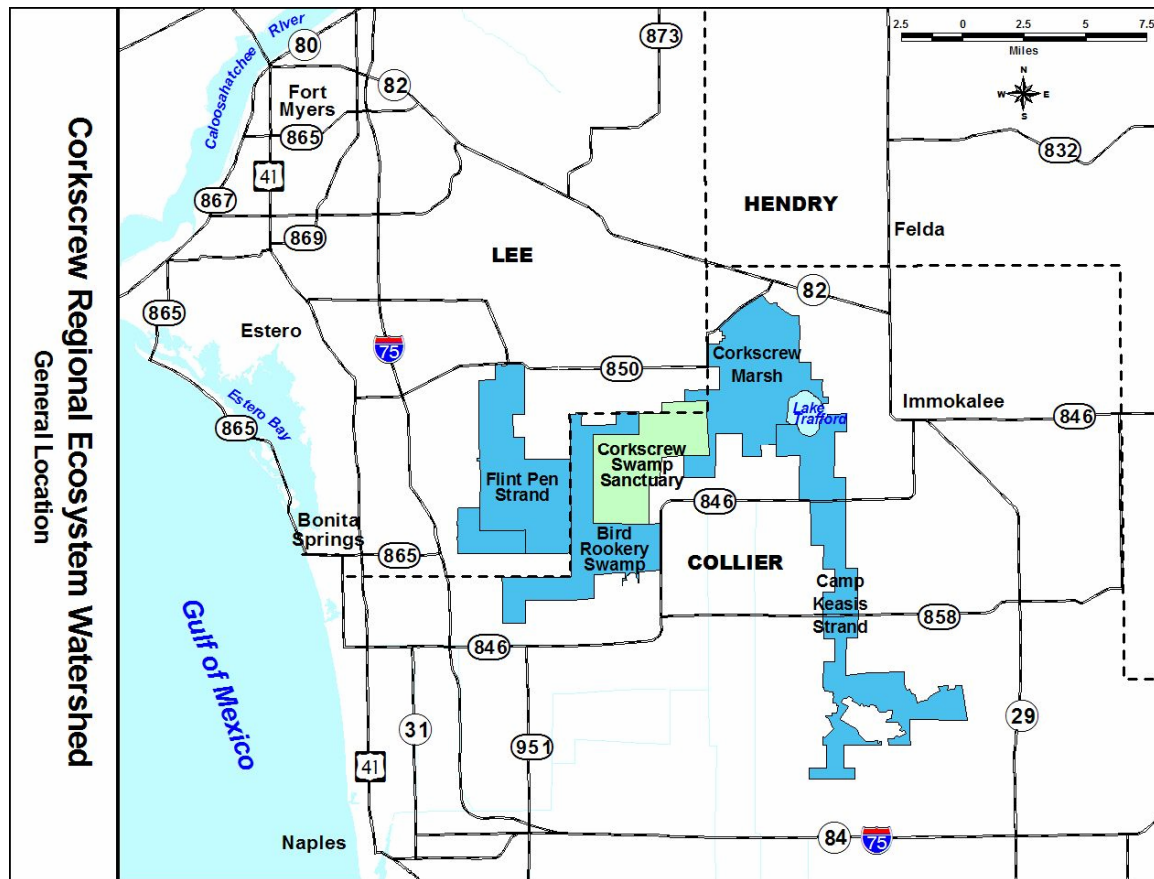
The associated environmental benefit of land acquisition in CREW contributes to corridor building and improved wildlife habitat for threatened and endangered species. Conservation and protection of water resources in CREW also provide improved water quality and flood protection.

## ACQUISITION

The Summary of Wetlands Mitigation Balances by Project (also referred to as the financial summary report), dated September 30, 2006, prepared by the District's Accounting and Financial Services Division, indicates a balance of \$803,102 available in the CREW land acquisition fund. During FY2006, due to a lack of available willing sellers, no funds were expended for land acquisition or associated costs for CREW. **Table 7-1** provides a summary of the mitigation lands acquired to date within the CREW boundary. The SFWMD is presently evaluating opportunities by which the mitigation acquisition funds can be used to replace funds that were used to previously acquire lands in CREW. The entire available CREW acquisition balance is expected to be utilized during FY2007 to reimburse previous funding sources. Utilizing the CREW acquisition balance will fully debit the mitigation acquisition obligation.

## RESTORATION

The financial summary report indicates an available balance of \$485,624, as of September 30, 2006, in the restoration fund. During FY2006, the District expended \$243,576 for contractual services in the initial and follow-up treatment of exotic species such as melaleuca, Brazilian pepper, downy rose myrtle, *Lygodium*, and wedelia on 2,555 acres in CREW. In addition to exotic species control costs, other restoration expenditures included \$2,995 for staff support of contractors, \$8,500 for contractual services to support monitoring of restoration projects, and \$12,910 to the Florida Fish and Wildlife Conservation Commission for security services. The total restoration expenditures were \$267,980. A total of \$498,500 is budgeted for FY2007, including \$490,000 for exotic removal and \$8,500 for continued monitoring of restoration projects.



**Figure 7-1.** Location of the Corkscrew Regional Ecosystem Watershed (CREW).

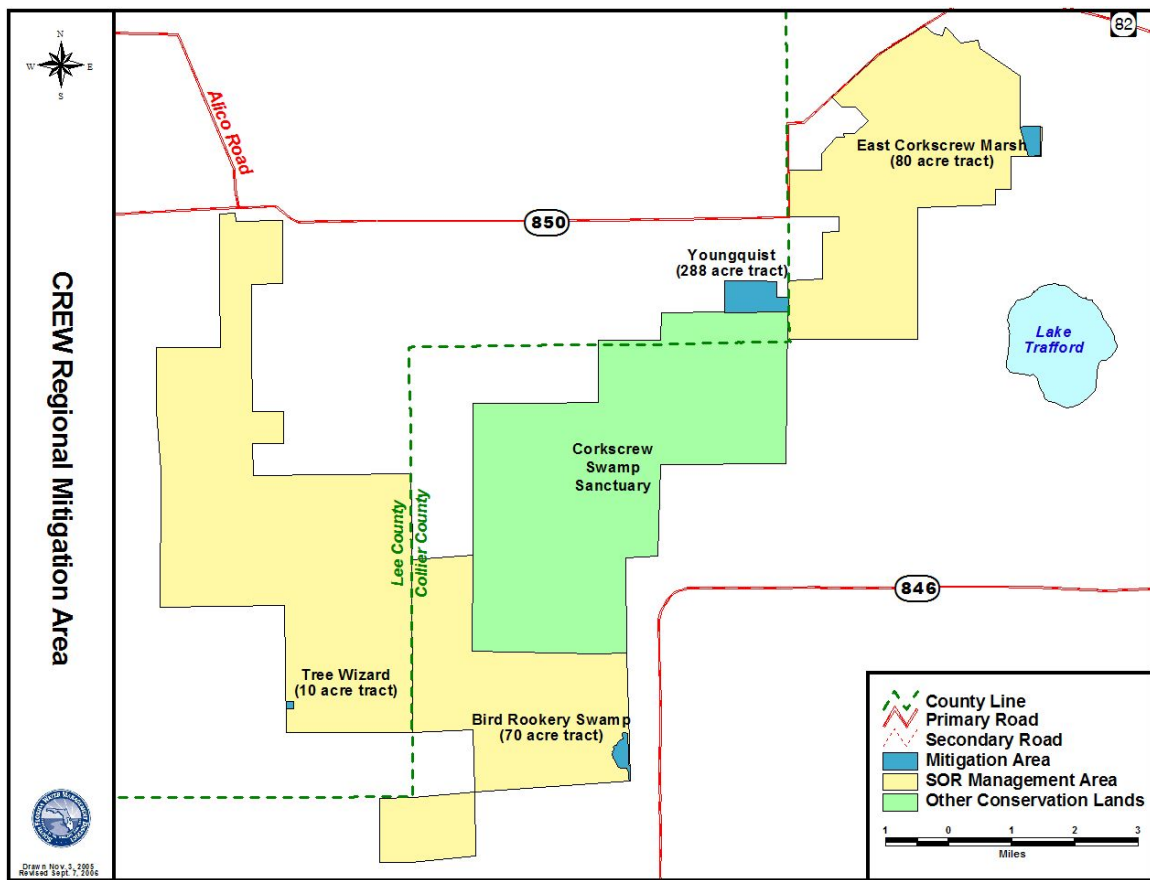
**Table 7-1.** CREW acquisition parcels using mitigation funding as of September 30, 2006.

Tract Number	Acreage Acquired	Cost	Location
001-002	237.4	\$200,840	R27, T45, S13
003-488	40.0	\$61,000	R26, T47, S24
003-765	5.0	\$20,000	S35
003-757	5.0	\$20,000	"
003-776	5.0	\$20,000	"
003-761	5.0	\$20,000	"
003-766	5.0	\$20,000	"
003-758	5.0	\$20,000	"
003-772	5.0	\$20,000	"
003-804	25.0	\$45,000	S21
003-805	2.5	\$4,500	"
003-806	5.0	\$9,000	"
003-807	2.5	\$4,500	"
003-808	2.5	\$4,500	"
003-809	2.5	\$4,500	"
003-815	185.0	\$333,000	S22 & S27
003-816	10.0	\$10,500	S22
003-826	30.0	\$54,000	S24
003-828	5.0	\$9,000	"
003-829	65.76	\$117,000	"
003-833	2.5	\$4,500	S21
003-760	5.0	\$130,000	S35
003-755	10.0	\$45,000	"
001-038	283.49	\$992,984	R27, T46, S35
100-005	20.0	\$250,000	R26, T47, S31
003-234	5.0	\$17,000	S27
003-245	5.0	\$12,500	"
003-256	5.0	\$23,000	"
003-277	5.0	\$23,000	"
003-278	5.0	\$23,000	"
003-302	5.0	\$17,000	"
003-304	5.0	\$23,000	"
003-307	5.0	\$23,000	"
003-308	5.0	\$23,000	"
003-325	10.0	\$25,000	S28
003-358	10.0	\$25,000	S28
003-302	5.0	\$17,000	S27
003-226	5.0	\$23,000	S27
003-896	5.0	\$17,500	S22
003-957	5.0	\$18,750	S28
<b>Total</b>	<b>1,054.15</b>	<b>\$2,730,574</b>	

During FY2006, \$8,500 was expended on the monitoring of four CREW restoration sites: Tree Wizard, Bird Rookery Swamp, Youngquist, and East Corkscrew Marsh (**Figure 7-2**). This expenditure was used to document vegetative change in response to hydrologic improvements, ground cover restoration, exotic plant control, and re-vegetation activities. Restoration progress is measured by the reduction of exotic species and recruitment of target native species within the four sites. These sites are in various stages of site preparation, exotic removal and treatment, re-vegetation, and hydrologic restoration occurring over a five-year period. Other monitoring included water level and/or soil saturation, observed aquatic macro fauna, wildlife utilization, and/or indicators of wildlife (i.e., tracks, scat) at randomly located plots within the three larger sites and at plots along a single transect on the 10-acre Tree Wizard site. During FY2006, the District's contractor, KCI Technologies Inc., submitted its fifth (December 2005) and sixth (June 2006) semiannual monitoring reports, which evaluate CREW treatment efforts. The latter monitoring report indicated continued improvement in vegetative composition including substantial decreases in troublesome exotic grasses (smut grass, Para grass, and Bermuda grass), which has positively resulted in increases in native species.

## MANAGEMENT

The financial summary report indicates that as of September 30, 2006, a balance of \$56,923 interest earned on the corpus amount is available for management activities. The interest on the land acquisition and restoration account is \$366,890, which can be used for land acquisition, restoration, or management. The total funding available as interest is \$423,813.



**Figure 7-2.** CREW monitoring sites.

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## PENNSUCO

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The Pennsuco Regional Mitigation Area in Miami-Dade County is part of the Pennsuco Wetlands, or Cell 26 (**Figure 7-3**), of the East Coast Buffer (ECB). Pennsuco Wetlands/Cell 26 covers an area of approximately 13,000 acres in Miami-Dade County. Pennsuco is located between the Dade-Broward Levee, Krome Avenue (State Road 997), and the Tamiami Trail (U.S. 41).

In 1995, the SFWMD began utilizing Pennsuco as a regional offsite mitigation area, allowing permit applicants to make mitigation contributions for the acquisition, enhancement, and long-term management of Pennsuco lands as compensation for permitted wetland impacts. The environmental benefit provides protection, enhancement and management of the floral, faunal, and hydrologic resources of Pennsuco parcels. Pennsuco emphasizes the enhancement of a degraded ecosystem that likely will continue to degrade and further impact adjacent natural areas unless actions are taken to reduce the spread of exotics. The enhancement of Pennsuco has the potential to yield regional ecological benefits and contribute to the goals of the Everglades restoration.

### ACQUISITION

During FY2006, no mitigation funds were used from the acquisition account. The financial summary report indicates that as of September 30, 2006, a balance of \$0 is available in the Pennsuco land acquisition fund. During FY2005, the land acquisition account and interest on land and restoration account were fully debited to satisfy the acquisition obligation. **Table 7-2** summarizes acquisition to date in Pennsuco.

### RESTORATION

The treatment program, initiated in 1998, involves a multiyear herbicidal and manual removal program with a follow-up controlled burn. After the entire site has been treated with initial and follow-up treatments, it is expected that melaleuca will be controlled by routine maintenance through use of the long-term management fund. Land managers conduct semiannual aerial and on-ground monitoring to evaluate exotic treatments and provide timely, adaptive follow-up treatment.

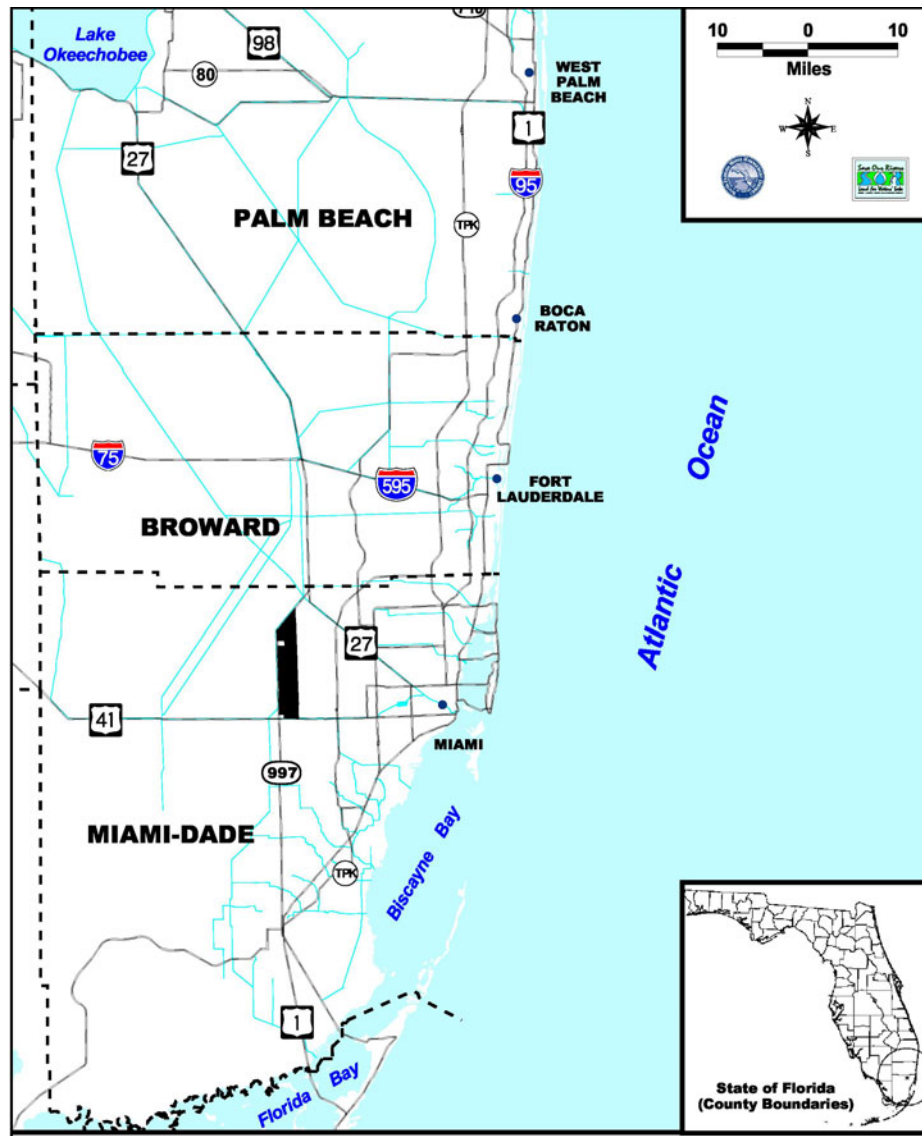
The financial summary report indicates a balance of \$5,733,114, as of September 30, 2006. During this fiscal year, the District expended \$848,861 for contractual services in the initial and follow-up treatment of 4,425 acres of exotics. A summary of the tracts with exotic treatments to date and plans for FY2007 are provided in **Figure 7-4**. In addition to exotic control costs, other restoration expenditures included \$2,995 for staff support of contractors and \$5,248 for preparation of an environmental audit. The response of vegetation over time is depicted in **Figure 7-5**.

During this reporting period, KCI submitted its seventh (December 2005) and eighth (June 2006) semiannual monitoring reports, which evaluate Pennsuco treatment efforts. The monitoring requires qualitative and quantitative assessments that document the success of the vegetative restoration, reduction of exotic species, and recruitment of target native species, particularly sawgrass. Water level and/or soil saturation, observed aquatic macro fauna, wildlife utilization, and/or indicators of wildlife (i.e., tracks, droppings) were also recorded. The latest monitoring report indicates that melaleuca is under control, representing only three percent of the total vegetative composition in 2006. Native vegetation is showing a strong recovery with sawgrass increasing more than 50 percent over this reporting period. Funding of \$8,060 to support this effort was debited from the restoration account.

The total restoration expenditure in FY2006 was \$865,164. A total of \$1,008,060 is budgeted for FY2007, including \$1,000,000 for exotic removal and \$8,060 for continued monitoring of restoration projects.

## MANAGEMENT

According to the financial summary report, \$547,344 was available as interest from the corpus amount as of September 30, 2006. Utilization of monies from this fund will commence when initial and follow-up exotic treatments are completed and the project is at a maintenance level for treatment. Additionally, there is \$104,187 in the acquisition and restoration interest account for acquisition, restoration, or management. The total funding available as interest is \$651,531.



**Figure 7-3.** Location of the Pennsuco Regional Mitigation Area.

**Table 7-2.** Pennsuco acquisition parcels using developers' mitigation funding (211), as of September 30, 2006.

Tract Number	Acreage Acquired	Mitigation Funded	% of Tract
300-932	482.50	\$868,500	100%
300-912	160	\$400,000	50%
300-913	320	\$800,000	100%
301-916	160	\$400,000	50%
301-917	120	\$300,000	50%
300-962	160	\$400,000	50%
304-973	320	\$800,000	100%
304-940	5	\$15,000	100%
304-941	10	\$30,000	100%
304-952	10	\$30,000	100%
305-967	5	\$15,000	100%
306-920	10	\$30,000	100%
305-951	1.36	\$4,800	100%
306-926	2.5	\$8,750	100%
305-968	5	\$15,000	100%
305-915	1.44	\$5,100	100%
305-912	5	\$15,000	100%
305-956	0.68	\$2,400	50%*
305-957	0.68	\$2,400	50%*
305-927	2.045	\$7,150	50%*
300-919	40	\$100,000	50%*
303-965	5	\$15,000	50%*
**	407.2	\$2,011,750	**
300-964	120	\$1,800,000	100%
304-934	60	\$900,000	100%
<b>Total</b>	<b>2,413.405</b>	<b>\$8,975,850</b>	

\* Lands acquired with 50 percent miners' mitigation funds and 50 percent developers' mitigation; acreage represented is amount acquired with fund 211 only.

\*\* 56 parcels total, with federal share contributing 50 percent of the acquisition price on 40 of these parcels – indicated in italics. The balance of the tracts and other 50 percent of federally acquired tracts were acquired with Preservation 2000 (P2000). Mitigation funds were used to swap out the P2000 acquired land with 50 percent coming from developers' (fund 211) and 50 percent from the Lake Belt miners' fund. The 56 parcels included the following: 300-914, 300-917, 300-920, 300-921, 300-925, 300-928, 300-929, 300-931, 300-959, 300-961, 300-963, 300-987, 300-988, 300-989, 300-990, 300-991, 300-992, 300-993, 300-994, 300-995, 300-996, 301-900, 301-903, 301-904, 301-906, 301-907, 301-908, 301-910, 301-913, 301-914, 301-915, 304-932, 304-971, 305-903, 305-921, 305-928, 306-929, 306-935, 306-943, 306-948, 306-966, 306-976, 306-977, 307-923, 307-924, 307-925, 307-926, 307-928, 307-929, 307-930, 307-934, 307-936, 307-938, 304-966, 304-968, and 304-974.



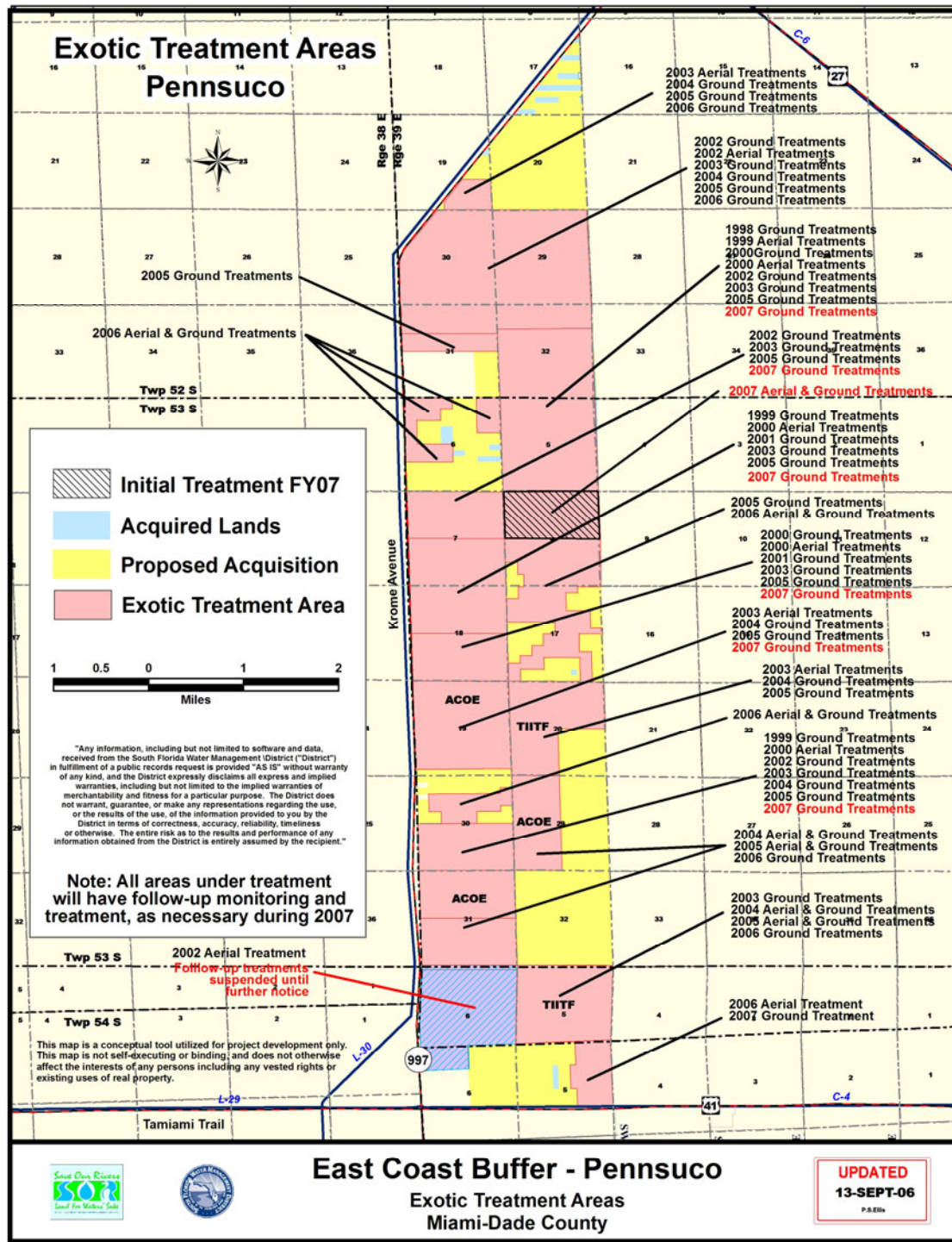
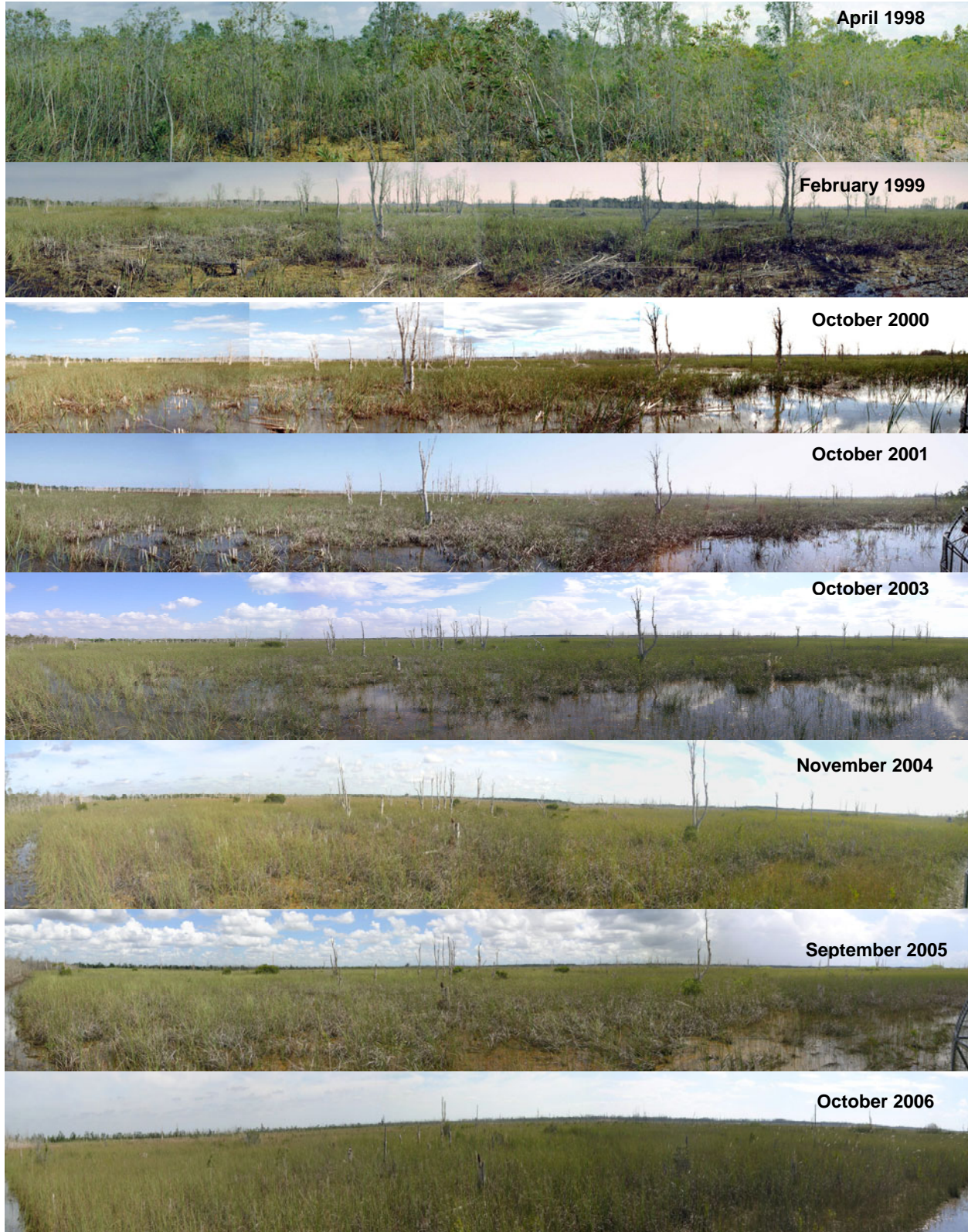


Figure 7-4. Exotic treatment areas in Pennsuco.





**Figure 7-5.** Photographs of exotic treatments in the Pennsuco Wetland Mitigation Area from April 1998 through October 2006.

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## SUMMARY

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The following financial summary, as of September 30, 2006, shows the balances available in acquisition, restoration, and management categories:

<b>Project</b>	<b>Land Acquisition</b>	<b>Restoration</b>	<b>Long-term Maintenance*</b>	<b>Total</b>
CREW	\$803,102	\$485,624	\$423,813	\$1,712,539
Pennsuco	\$0	\$5,733,114	\$651,531	\$6,384,645

\*Includes interest on long-term management fund corpus and interest on land and restoration funds.

The following expenditure summary categorizes mitigation fund spending into components of acquisition, restoration, and management during FY2006.

<b>Project</b>	<b>Land Acquisition</b>	<b>Restoration</b>	<b>Long-term Maintenance</b>	<b>Total</b>
CREW	\$0	\$267,980	\$0	\$267,980
Pennsuco	\$0	\$865,164	\$0	\$865,164
<b>Total</b>	<b>\$0</b>	<b>\$1,133,144</b>	<b>\$0</b>	<b>\$1,133,144</b>

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## LITERATURE CITED

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Mumby, F. 2006. Summary of Wetlands Mitigation Balances by Project. South Florida Water Management District, West Palm Beach, FL.